

Applicants further submit the following amendment for entry in the above-identified case.

IN THE CLAIMS:

Please add the following claims:

✓ 52. An isolated nucleic acid molecule encoding a protein which comprises a SOCS box, wherein said SOCS box comprises an amino acid sequence as set forth in SEQ ID NO: 52 or SEQ ID NO: 55, or an amino acid sequence having at least about 70% similarity to SEQ ID NO: 52 or SEQ ID NO: 55.

53. The isolated nucleic acid molecule of claim 52, wherein said protein comprises an amino acid sequence as set forth in any one of SEQ ID NO: 4, SEQ ID NO: 10 or SEQ ID NO: 12, or an amino acid sequence having at least about 50% similarity to any one of SEQ ID NO: 4, SEQ ID NO: 10 or SEQ ID NO: 12.

✓ 54. An isolated nucleic acid molecule comprising a nucleotide sequence as set forth in any one of SEQ ID NO: 3, SEQ ID NO: 9 or SEQ ID NO: 11, or a nucleotide sequence which hybridizes under low stringency conditions to any one of SEQ ID NO: 3, SEQ ID NO: 9 or SEQ ID NO: 11, wherein said low stringency conditions comprise at least about 1% v/v to at least about 15% v/v formamide at least about 1M to about 2M salt for hybridization at 42°C, and at least about 1M to about 2M salt for washing.

55. The isolated nucleic acid molecule of any one of claims 52-54, wherein said nucleic acid molecule is derived from mouse, rat or human.

56. The isolated nucleic acid molecule of any one of claims 52-54, wherein said protein modulates signal transduction.

57. The isolated nucleic acid molecule according to claim 56, wherein said protein modulates cytokine-mediated signal transduction.

58. The isolated nucleic acid molecule according to claim 57 wherein the signal transduction is mediated by IL-6.

59. An expression vector comprising the nucleic acid molecule of any one of claims 52-54.

60. A host cell comprising the expression vector of claim 59.

61. A method of producing a SOCS protein, said method comprising culturing the host cell of claim 60 under conditions allowing the expression of said SOCS protein, and isolating said SOCS protein.

62. An isolated protein comprising a SOCS box, wherein said SOCS box comprises an amino acid sequence as set forth in SEQ ID NO: 52 or SEQ ID NO: 55, or an amino acid sequence having at least about 70% similarity to SEQ ID NO: 52 or SEQ ID NO: 55.

63. An isolated protein comprising an amino acid sequence as set forth in any one of SEQ ID NO: 4, SEQ ID NO: 10 or SEQ ID NO: 12, or an amino acid sequence having at least about 50% similarity to any one of SEQ ID NO: 4, SEQ ID NO: 10 or SEQ ID NO: 12.

64. The isolated protein of claim 62 or 63, wherein said protein is derived from mouse, rat or human.

65. The isolated protein of claim 62 or 63, wherein said protein modulates signal transduction.

66. The isolated protein of claim 65, wherein said protein modulates cytokine-mediated signal transduction.